

In achieving these goals, as set forth in the claims, the retard ignition control means includes a period measuring means and an arithmetic means "for generating said driving signal in dependence on the period of said specific interval and validating a succeeding rotation sensor signal generated in succession to said specific interval. The arithmetic means includes an expectation period setting means for "setting on the basis of the period of the specific interval in the expectation period during which the succeeding rotation signal is expected to be generated." In this manner, only the succeeding rotation sensor signal, which is inputted during the expectation period, is validated.

The ignition timing circuit 4 is disclosed at page 8 and the period measuring means within the CPU 46 is disclosed at page 11. The operation of the ignition circuit as claimed is provided at pages 12-16 where the operation of the fail-safe function based upon the expectation output period is explained with regard to Fig. 2. The use of the expectation period to avoid problems with reverse rotation on the basis of the expectation period is explained at page 18. Finally, a summary of the features of the invention appears at page 19. There it is explained that by measuring the specific intervals between the crank angles, the post input timing can arithmetically be predicted for the rotation sensor signal R to be inputted in succession during the expectation period.

Nothing of this type is disclosed in the cited reference.

Cabis et al

The cited references is a position and speed sensor having a circular element one with two position indicators (3, 4) of different angular width. A sensor (5) senses the passage of each of the position indicators as it passes the sensing element and produces an electrical signal having a duration corresponding to angular widths of the indicators. The electrical signals are processed to produce information as to the angular position and angular velocity of the circular element. Further, Cabis et al discloses a method for reverse rotation detection using the position and speed sensor means. However, nowhere in the entire disclosure of the reference is there any teaching or suggestion of the foregoing structure as set forth in the claim.

The Examiner cites text at col. 4, line 56 - col. 5, line 9 and col. 6, lines 6-43 for support. However, nothing in this text, or anywhere else in the disclosure is there any mention of an

expectation period setting means or an act of validation based upon the appearance of a signal during an expectation period that has been calculated. Accordingly, Applicant would submit that the rejection must fail since there cannot be an anticipation of the claim in the absence of a claimed structural element.

Should the Examiner persist in this rejection, the Examiner is respectfully requested to point out how each of the recited means in the independent claim 1 which form a part of the retard ignition control means is found expressly taught in the reference.

Claim Rejections - 35 U.S.C. § 103

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cabis et al (6,208,131). This rejection is traversed for at least the following reasons.

The Examiner cites Cabis et al as applied to claims 1 and 4 in support of this rejection of these two dependent claims and admits that Cabis et al does not mention correction of threshold values based on changes of temperature or load. The Examiner finds such elements to be simply routine error corrections.

This rejection should be withdrawn because Cabis does not teach the fundamental structures of the parent claims, as already explained. Further, these claims add limitations that are express and have significance to the invention, as expressly disclosed in the specification, and are simply not met in the reference by the Examiner's own admission. In the absence of this structure there can be no *prima facie* basis for an obviousness-type rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Response Under 37 C.F.R. §1.111
U.S. Application No. 10/797,040

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

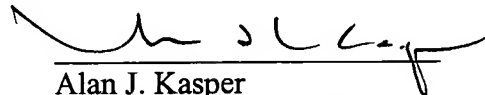
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